

What is claimed is:

- Sub A2
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1. A graft polymer comprising a backbone moiety and at least one moiety grafted onto the backbone moiety, wherein said backbone and grafted moieties comprise a hydrophobe and an amine or amide.
  2. The graft polymer of claim 1 comprising a hydrophobic backbone and a grafted moiety comprising an amine, an amide, or a mixture thereof.
  3. The graft copolymer of claim 2, wherein said hydrophobic backbone is a polymer
  4. The graft copolymer of claim 3 wherein said hydrophobic backbone polymer is a natural polymer.
  5. The graft copolymer of claim 2 wherein said hydrophobic backbone is a non-polymer.
  6. The graft polymer of claim 1 comprising an amine backbone and a grafted hydrophobic moiety.
  7. The graft polymer of claim 1 comprising a backbone moiety consisting of both a hydrophobic moiety and an amine moiety, wherein said grafted moiety is an amine, amide, or mixture thereof.
  8. The graft copolymer of claim 1 wherein said amine comprises a quaternized amine, N-oxide, alkoxylated amine, or mixture thereof.
  9. The graft copolymer of claim 1 wherein said amine is at least partially neutralized.
  10. The graft polymer of claim 1 wherein the weight ratio of said amine to said hydrophobe is from 1000:1 to 1:1000.
  11. The graft polymer of claim 10 wherein the weight ratio of said amine to said hydrophobe is from 100:1 to 1:100.
  12. The graft polymer of claim 11 wherein the weight ratio of said amine to said hydrophobe is from 10:1 to 1:10.
  13. The graft polymer of claim 11 wherein the weight ratio of said amine to said hydrophobe is about 1:1.
  14. A composition comprising the graft polymer of claim 1, and an ingredient selected from the group consisting of a surfactant, builder, enzyme, perfume, optical brightner, fillers, anti-fungal and anti-microbial agents, pigments, co-builders, anti-oxidants, dispersants, anti-foaming agents, acids, bases, preservatives, water-softening agents, sunscreen agents and mixtures thereof.
  15. A treated substrate comprising a substrate having associated thereon the graft copolymer of claim 1.
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Sub 192  
cont

16. The treated substrate of claim 15, wherein said substrate is selected from the group consisting of textiles, fabrics, ceramics, paper, leather, wood, hair, skin, metal, tile, carpet, floor coverings, cementitious substrates, glass, plastic, non-wovens, concrete, insulation, mineral slurries, and shale

5 17. A control release formulation comprising an active substance encapsulated, coated, or associated with the graft copolymer of claim 1.

18. The control release formulation of claim 17, wherein said active substance comprises at least one water-soluble substance, at least one water-insoluble substance, or a mixture thereof.

19. A method for the delivery of an active ingredient comprising:

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- a) coating or encapsulating an active ingredient with the graft copolymer of claim 1;
  - b) introducing said coated or encapsulated active ingredient into an aqueous environment; and
  - c) decreasing the pH of the aqueous environment to solubilize the graft copolymer, thereby releasing the active ingredient.

20. 17. The method of claim 16 wherein the aqueous environment of step b) has a pH of greater than pH 8, and wherein the pH of said aqueous environment is lowered below pH 8 in step c).